

Public Health Code Regulations 19-13-B100a and 19-13B103

Regulation Outline

(not all inclusive)

B100a

(a) Definitions

Accessory structures: garages, decks, screened porches (non-winterized), sheds

Building conversions: winterizing (adding heat/insulation, year round water) seasonal cottages for year round use

Change in use: Activities that have the potential to increase sewage flow or required septic system size

Code-complying area: An area on a property that can fit a fully sized septic system meeting all current requirements (size, MLSS, separating distances, etc) except 100 % reserve area

Potential repair area: Areas on non-code complying lots that may be needed to repair the septic system.

Note: Includes areas where exceptions could be granted but does not include those areas beyond that necessary for a system repair.

(b) Building conversion and change in use

Can only be approved if lot can support a code-complying area

Local health department can require system expansion or installation of code-complying system if change in use increases design flow by more than 50%

(c) Building additions

Separation distances to existing septic system must be maintained

Can be permitted if code-complying area is identified

If lot cannot support code-complying area then building addition can only be approved if the following five items are complied with:

1. The site can support a minimum of 50% of the required effective leaching area.
2. The site can support a minimum of 50% of the required MLSS. Spread must be maximized. The maximum percent of available MLSS must be provided, 50% is the minimum that can be excepted if no greater percentage can be demonstrated.
3. No well exceptions (50% required spread outside 75' wall arc)
4. The addition does not reduce the potential repair area
5. The addition does not increase the design flow. Note: An increase in design flow would constitute a change in use necessitating a code-complying area.

(d) Accessory structures/ pools

Can be approved if either:

Lot can support code-complying area and separation distances are OK

or

Structure doesn't reduce potential repair area and separation distances are OK

(e) Sewage disposal area preservation

Lot line changes: Can only be approved if:

The existing septic system remains on the lot

and

The lot can support a code-complying area and separation distances are OK

Other activities affecting soil characteristics or hydraulic conditions:

Can be approved if:

The lot can support a code-complying area and separation distances are OK

(f) Appeals

Denials can be appealed to State Health Department

B103

B103a Scope: Minimum requirements for household and small commercial sewage disposal systems with capacity of 5,000 GPD or less, non-discharging toilet systems and procedures for permits by local health departments as required by Section 25-54i (g) of the General Statutes. Only RS or Director of Health can issue permits.

B103b Definitions:

- (a) **Sewage:** Note it does not include; manufacturing process water, cooling water, softener backwash, storm water, collected groundwater.
- (c) **Subsurface sewage disposal systems** (septic systems) also include any groundwater control system on which the operation of the leaching system is dependent.
- (g) **Impervious soil** is soil that percs slower than **60** minutes per inch.
- (i) **Maximum groundwater** is the level to which groundwater rises for a duration of **one month** or longer during the wet season.
- (j) **Open watercourses** do not include roadside swales that convey water only after a rain event but does include seasonal standing or flowing water.
- (k) **Local director of health** includes his/her authorized agents.
- (n) **Gray water** is domestic sewage with no toilet waste (black water).

B103c General Provisions:

- (a) **All sewage** must be disposed by **public sewers, subsurface sewage disposal systems, or other methods approved by DPH**
- (b) All sewers, septic systems, privies, toilets and plumbing systems shall be kept in a **sanitary conditions** at all times and **prevent odor problems and exclude animals and insects.**
- (c) **Disposal of septage** (waste from septic tanks):
 - On-site:** Burial to avoid health hazards and nuisances
 - Off-site:** Licensed pumpers required. Permit needed from local health department. Disposal location must be noted on application. No disposal on public water supply watershed unless state approved.
- (d) **Pump trucks** must be watertight and have company/licensee name and licensee number on them. Vehicle and equipment (hoses, buckets) must be in clean condition when not in use. Rinse water is considered sewage and must be disposed of in a sanitary manner approved by local health dept.
- (e) **Septic Tank Pumping:** Lower liquid level first to avoid sludge/scum from flowing to leaching system. All scum and sludge must be removed. Baffles must be inspected for damage or clogging at time of pumping. Avoid damaging system and clean up spills.
- (f) **Health hazards and nuisances** caused by sewage. Local health departments must investigate these complaints and take action to abate (eliminate) them. Notice of violation code reference.

B103d Minimum Requirements:

- (a) **All septic systems must meet all requirements unless an exception is granted per code process.**
 - (1) **Local Health Department Exceptions: Only for repairs** and only if code compliance can not be achieved and upon determination that health hazard/nuisance conditions is unlikely to result from exception. Exception examples: 5' to property line, system size, center to center spacing. MLSS, etc. Exceptions granted must be reported to DPH within 30 days. **No exceptions for new construction. Local health departments cannot grant exceptions that per code must be granted by DPH** (see below).
 - (2) **State Health Department Exceptions to B103d (d)**
 - (A) **Central Systems:** Exceptions allowing a common system to serve more than one building, Exceptions granted if technically preferable due to site limitations, facilitates construction or maintenance, or future connection to public sewers.
 - (B) **Off lot systems (Easement Arrangements):** Exception allowing sewage disposal system to be located on a lot other than the lot on which a building served is located. Easement required to be filed on land records.

- (3) **State Health Department Exception to Technical Standard II A (well separation Distance):**
Exception allowing sewage system to be located less than 75 feet from a water supply well, typically for repairs.
- (b) **Technical Standards** – State Health Department reviews Technical Standards annually and changes are made available **January 1st** of each year.
- (c) **Large Systems:** Systems with design flows of **2000 GPD or greater** must be **approved by DPH** (State). 20 day review period. **Plans** must be designed by CT Professional Engineer (**PE**). Plans must be complete (Basis of design, soil information, grades, property lines, wells, building locations, watercourses, etc.).
- (d) Each building must be served by **separate septic system on same lot** as building (Exceptions can be granted by DPH).
- (e) **Areas of Special Concern** (Area of S. C.).
- (1) The following are Areas of S. C.:
 - (A) Perc faster than 1 minute per inch.
 - (B) Perc slower than 30 minutes per inch.
 - (C) Maximum groundwater less than 3 feet below grade.
 - (D) Ledge rock less than 5 feet below grade.
 - (E) Slopes exceeding 25%
 - (F) Severe Rating per Soil Survey
 - (G) Wetland Soils
 - (H) Drawdown area of public well (50 GPM +) or within 500 feet of approved public well site.
 - (2) **Wet Season Monitoring:** Local Health Dept. can require wet season (**Feb 1-May 31**) monitoring for maximum groundwater determination in Areas of S. C.
 - (3) **New Systems in Areas of S. C. must be PE designed.** Complete plans required. Hydraulic analysis can be requested. Locals can approve P.E. plans if certified
 - (4) **Repairs:** Local health **may require P.E. plans** if conditions/constraints warrant.
 - (5) **P.E. Supervision** may be required in Areas of S.C.
 - (6) Hydraulic Assessment can be requested
 - (4) Gray Water Systems: Must have septic tank and leaching system that is at least half size.
Note: Black water system is full sized, therefore, 1 and 1/2 system provided.

B103e Procedure/Conditions for Issuance of Permits/Approvals: Permits issued by local health department. No system work without permit. No system used without permit to discharge.

(a) No permit or approval shall be issued for:

- (1) System (new or repair) with discharge to watercourse.
- (2) New system unless public water or well site available.
- (3) New system in unsuitable soil conditions:
 - Impervious existing soil.
 - Less than 4 feet of suitable existing soil above ledge rock, two feet of which is naturally occurring.
 - Less than 18 inches of suitable existing soil over impervious soil.
 - Maximum groundwater less than 18 inches
- (4) New system where naturally occurring can not handle sewage flow. i.e., Filled wetland sites

(b) Local Health Agents:

- (1) Must be authorized by director of health
- (2) DPH Certifications:
 - (A) Phase 1: All inspections, reviews, except PE plans
 - (B) Phase 2: PE plan review certification

(c) Application for Permit or Approval

- (1) No investigation, inspection or approval without application.
- (2) Application Forms (Form #1 or approved equal). Plot plan needed.

- (3) If incomplete than may be rejected

(d) Site Investigation

- (1) Shall be conducted by either the local director of health or a professional engineer and reported on an application form (Form #2 or approved equal) The follow information is required:
 - (A) Soil test locations, measures and observations.
 - (B) Soil percolation results.
 - (C) Observations of groundwater and ledge rock.
 - (D) A conclusion as to the sites suitability for subsurface sewage disposal.
 - (E) Any special design requirements or further testing.
- (2) Prior to the site investigation, the applicant shall:
 - (A) Provide for the digging of percolation test holes and deep observation pits in the area of the proposed leaching system.
 - (B) Provide water for performing percolation tests
 - (C) If required by the local DOH, locate field stakes for the leaching system, house, well or property lines.
- (3) Site investigation must be conducted within 10 working days of application.
- (4) The local DOH must assure the accuracy of soil tests, deep observation pits and maximum ground water levels.
- (5) Leaching system size is based on percolation tests made in the area of the proposed leaching system. Other soil absorption capacity methods may also be used in accordance with the Technical Standards.
- (6) Areas of special concern, or systems with flows over 2000 GPD may be required by the local DOH to provide further testing. This includes permeability tests, sieve analysis, the installation of ground water monitoring pipes, etc.

(e) Approval to Construct

- (1) Approval from the local DOH may be granted if compliance with PHC Section 19-13-B103d has been demonstrated. Approvals are valid for 1 year and may be renewed if reasonable cause is demonstrated for the failure to start construction with the 1 year period.
- (2) Only persons licensed by the Commissioner of Public Health may construct subsurface sewage disposal systems. Such person must notify the local DOH at least 24 hours prior to construction.
- (3) Systems with design flows of 2000 GPD or greater must be approved by the Commissioner of Public Health prior to approval to construct is granted by the local DOH.
- (4) In areas of special concern, approval to construct cannot be issued until 20 days following approval from Commissioner of Public Health unless earlier approved.

(g) Inspection

- (1) The local DOH must inspect all subsurface sewage disposal systems prior to covering
- (2) Prior to covering the system, the system installer shall notify the local DOH the site is prepared for inspection. The inspection shall be conducted as soon as feasible, but no later than two (2) working days after receipt of the request unless the owner agrees to an extension.
- (3) A final inspection report shall be prepared by the local DOH on forms deemed by the commissioner of Public Health as equivalent to Form #3 in the Technical Standards.
- (4) An as-built plan shall be required by the local HOH.

(h) Permit to Discharge

- (1) A permit to discharge shall be issued by the Local DOH upon determination that the subsurface sewage disposal system has been installed in compliance with the PHC. The Permit to Discharge can't be issued until an As-built is received and approved.

- (2) All permit to discharge for subsurface sewage disposal systems with a capacity less than 5000 GPD shall:
 - (A) Specify the manner, nature and volume of discharge;
 - (B) Require proper operation and maintenance of any pollution abatement facility required by such permit;
 - (C) Be subject to such other requirements and restrictions as the Commissioner deems necessary to comply fully with the purposes of this chapter and the Federal Water Pollution Control Act; and
 - (D) Be issued on forms approved by the Commissioner of Public Health
- 3) The local DOH shall record all exceptions granted from any requirement of Section 19-13- B103d on the permit to discharge.

(i) Enforcement

- (1) The permit to discharge must not permit any sewage overflow, nuisance, or similar condition or the maintenance thereof.
- (2) If such a condition is found to exist, the permit shall be revoked, suspended, modified or otherwise limited and any such condition is subject to an order to abate the condition pursuant to CGS Section 19-79

(j) Records

Copies of completed applications, investigations reports, review and inspection forms and as-built plans or record drawings of each subsurface sewage disposal system shall be kept in the files of the town or health district for a minimum of 10 years.

(k) Rights of Applicants

- (1) All site investigations, inspections, review of plans and issuance of permits or approvals by the local DOH shall be made without reasonable delay
- (2) When requested in writing by the applicant, the local DOH shall designate in writing within 20 working days the requirements of Section 19-13-B103d or 10-13-B103e of these regulations which prevents such investigations, inspections, review, permit or approval.
- (3) Any Final decision of the local DOH made in regard to these sections shall be made in writing and sent to the applicant and if adverse to the applicant shall set forth the facts and conclusions upon which the decision was based. The written decision shall be deemed equivalent to an order and may be appealed pursuant to Section 19-103 of the CGS.

Section 19-13-B103f. Non-Discharging Sewage Disposal Systems

- (a) All non-discharging sewage disposal systems shall be designed, installed and operated in accordance with the Technical Standards unless an exception is granted by the Commissioner upon determination that the system shall provide proper and complete disposal and treatment of toilet wastes or gray water.

(b) Composts toilets

- (1) The local DOH may approve the usage of such toilets to replace an existing privy or failing subsurface sewage disposal system. The lot must also be tested and found suitable for the installation of a subsurface sewage disposal system meeting all requirements of Section 19-3-B103d of these regulations.
- (2) All wastes removed from these toilets shall be disposed of by burial or other methods approved by the local DOH

(c) Incineration toilets

Can be approved by the local DOH for the purpose of abating existing sewage problems or replacing the existing non-water carriage toilets.

(d) Chemical flush toilets and chemical privies

Can be approved by the local outside of buildings used for human habitation. When located inside human habitations, approval must be obtained from the Commissioner of Health and the local DOH. The waste from such toilets must be disposed of an approved manner and not disposed on a public

water supply watershed or within 500 feet of any water supply well unless approved by the Commissioner of Public Health.

(e) **Dry vault privies**

Can be approved by the local DOH for non residential use where located outside of buildings used for human habitation. Wastes removed from dry privy vaults shall be disposed of by burial or other methods approved by the local DOH.